

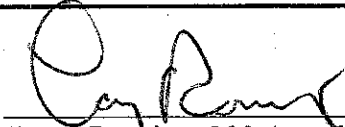
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FH-0601238

**Meeting Minutes Transmittal/Approval**  
**Unit Managers' Meeting**  
**200 Area Groundwater and Source Operable Units**  
**1200 Jadwin Avenue, Richland, Washington**  
**May 18, 2006**

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APPROVAL:



Larry Romine, 200 Area Unit Manager, DOE/RL

Date: 6-15-06

APPROVAL:



Arlene Tortoso, 200 Area Assistant Manager, DOE/RL

Date: 6/15/06

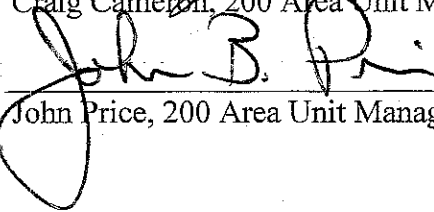
APPROVAL:



Craig Cameron, 200 Area Unit Manager, EPA

Date: 6/15/06

APPROVAL:



John Price, 200 Area Unit Manager, Ecology

Date: 6/15/2006**RECEIVED**  
JUN 21 2006**EDMC**

Minutes of the 200 Area Unit Managers' Meeting of May 18, 2006 are attached. Minutes are comprised of the following:

|               |   |
|---------------|---|
| Attachment 1  | Agenda  |
| Attachment 2  | Attendance Record   |
| Attachment 3  | Groundwater Operable Units Status   |
| Attachment 4  | Groundwater Operable Units Status Figures   |
| Attachment 5  | Attachment 3A, 200-PO-1 Operable Unit<br>Supplemental Groundwater Well List   |
| Attachment 6  | Source Operable Units and Facilities Status   |
| Attachment 7  | Comparison of Maximum Carbon Tetrachloride<br>Rebound Concentrations Monitored at 200-PW-1<br>Soil Vapor Extraction Sites, FY 2002-FY2006 |
| Attachment 8  | Carbon Tetrachloride Rebound Concentrations<br>Monitored at 200-PW-1 Soil Vapor Extraction<br>Sites, October 2005-April 2006              |
| Attachment 9  | Carbon Tetrachloride Concentrations<br>Monitored at 200-PW-1 Passive Soil Vapor<br>Extraction Wells, October 2005-April 2006              |
| Attachment 10 | Agreements and Issues List  |
| Attachment 11 | Action Item List  |

# **200 AREA UNIT MANAGERS' MEETING DRAFT AGENDA**

1200 Jadwin/Rm 1-C1  
May 18, 2006

## **GROUNDWATER OPERABLE UNITS STATUS (8:30-9:15)**

## **SOURCE OPERABLE UNITS AND FACILITIES STATUS (9:15-9:45)**

## **ISSUE RESOLUTION MEETING (10:00-11:30)**

- (See Issues List)

### **General**

- Outstanding Action Items
- Open for Regulatory Topics or Action Items
  - TPA Change Package Approvals

200 Area Unit Managers Status Meeting  
May 18, 2006

Please print clearly and use black ink

| PRINTED NAME        | ORGANIZATION    | O.U. ROLE            | TELEPHONE          |
|---------------------|-----------------|----------------------|--------------------|
| Shirley Cima        | OREGON          |                      | (541) 963 0853     |
| Sandra Lilligren    | Nez Perce Tribe |                      | 208 843-7375 x2443 |
| ROB GILBERT         | FH              |                      |                    |
| Ann Shattuck        | FH              | PW-1 Task Lead       | 376-8756           |
| Greg Thomas         | FH              |                      | 373-3907           |
| Rod Lobos           | EPA             |                      |                    |
| Mark Byrnes         | FH              | ZP-1/UP-1 Task Lead  | 373-3996           |
| Rick Bond           | Ecology         |                      | 372-7885           |
| Craig Vroman        | FH              | Tech Support         | 373-3907           |
| Arland Tortoso      | DOE-RL          | 200 Area GC          | 373-9631           |
| Mary Todd-Robertson | FH              | 200 Area Waste Sites | 373-3920           |
| John Price          | Ecology         | Proj. Mgr            | 372-7921           |
| Janice Jellum       | FH              | CP/GW Int            | 2-3553             |
| MARGO UDDGD         | DOE-RL          | PM-ALT               | 376-8375           |
| Gloria Cummins      | FH              | PO-1 LEAD            | 372-2484           |
| Jon Lindberg        | PNNL            | PO-1                 | 376-5005           |
| Ron Bruke           | FH              |                      | 376-2663           |
| B. Senter           | ECO             |                      | 372-7912           |
| J. Vanni            | ECO             |                      | 372-7930           |
| John Winterholder   | FH / GNP        |                      | 372-8144           |



## **200-UP-1, 200-ZP-1, AND 200-ZP-2 GROUNDWATER OPERABLE UNITS**

May 18, 2006

### **GROUNDWATER OPERABLE UNITS STATUS**

#### **200-UP-1 OU**

- Rebound Study:
  - Walked Ecology through the draft rebound study letter report on Tuesday, May 16, 2006.
  - DOE-RL will be formally sending this draft letter report on to Ecology in near future.
  - Tc-99 and uranium concentrations are still below the interim RAOs of 900 pCi/L and 48 ug/L respectively.
- RI/FS Work Plan:
  - Six of 12 new 200-UP-1 wells (UP1, UP2, UP3, UP4, UP5, and UP11) have been installed at this time. The remaining six new 200-UP-1 wells are currently scheduled to be installed in FY2007.

#### **200-ZP-1 OU**

- Remediation Treatment Status:
  - Between October 1, 2005 and April 30, 2006 the 200-ZP-1 pump-and-treat system average pumping rate was 203 gpm (Attachment 4, Figure 1).
  - All nine extraction wells were on line pumping at approximately 305 gpm until Tuesday, May 16 when the system was shut down due to a B+K Analyzer going out. We are currently awaiting craft to install a replacement B+K analyzer.
  - As noted last month, the Tc-99 concentrations in extraction wells 299-W15-765 and 299-W15-40 are climbing.
  - Ion exchange appears to be the preferred method for removing Tc-99 from 200-ZP-1 groundwater. A treatability test plan will be prepared starting next week to test the commercially available resin (A-530E) developed by Purolite.
- DNAPL Investigation Status:
  - The hookup of well 299-W15-6 to the 200-ZP-1 treatment system will be completed by the end of June.
  - The Z-9 slant well has reached its total depth at approximately 145 feet below ground surface. A proposed vapor well completion is soon to be presented to DOE-RL and EPA for their concurrence.
  - Vista will be performing vertical sampling (using hydraulic hammer rig) by Z-9 Monday next week.

- New Well Status:
  - We will soon begin drilling the first of 3 new wells to help define extent of deep CCL4 contamination detected in vicinity of Old Laundry Facility and T Plant.
  - EPA provided approval of DOE/RL-2000-40, Rev. 6, *Waste Management Plan for the Expedited Response Action for 200 West Area Carbon Tetrachloride Plume and the 200-ZP-1 and 200-PW-1 Operable Units*. Attachment 4. Figures 2 and 3 highlight the most important updates to the plan, which are new wells to be drilled in 200-ZP-1 OU.
- RI/FS Status:
  - RI Report Draft A was issued to DOE-RL April 27, 2006. DOE-RL does not see any problem meeting TPA milestone M-015-48A for delivering Draft A to EPA is May 31, 2006. Early copies have been unofficially delivered to EPA and Rick Dinicola (USGS).
  - In the February 15, 2006 FS kickoff meeting, EPA offered, if DOE was interested, that the M-015-48B milestone could be moved from May 31, 2007 to September 30, 2007 to bring it in alignment with the 200-PW-1 RI/FS schedule. Based on this FH is now working towards delivering the Draft A FS/PP to EPA by September 30, 2007.
  - Regarding the 200-ZP-1 FS Report, we met with EPA Monday April 17 to provide status on the initial screening of remedial technologies, and to request guidance on the risk assessment. Draft meeting minutes will be submitted for review.
- Tc-99 Investigation Status:
  - The draft DQO summary report will be released for stakeholder review at the end of this month.
  - The Sampling and Analysis Plan for drilling two new wells in FY06 is currently being prepared.
  - The Sampling and Analysis Plan for the other characterization activities developed through the DQO process is being prepared.

#### **200-PW-1 (200-ZP-2) OU**

- Soil Vapor Extraction System (SVE):
  - The active SVE system started up April 3, 2006 as scheduled. System went down April 11, 2006 for a few hours due to moisture buildup from the rain. It was restarted later that day.
  - Between April 3 and May 7, 2006, the system average extraction rate was 296 cfm (Attachment 4, Figure 4).
  - We will be working closely with Vista Engineering to help them test the effectiveness of steam injection on enhancing the recovery of CCl4.
- The passive system remains operational.

- Monthly monitoring (Attachment 4, Figures 5-7)
  - Comparison of Maximum Carbon Tetrachloride Rebound Concentrations.
  - Monthly Carbon Tetrachloride Concentrations for monitoring wells update.
  - Soil Gas Vapor Concentrations at passive wells update.



## 200-BP-5 GROUNDWATER OPERABLE UNIT

May 18, 2006

### GROUNDWATER OPERABLE UNIT STATUS

#### DQO Report

- The draft DQO report is approximately 98% complete.
- The DQO was sent to the stakeholders for review May 9<sup>th</sup>. Comments are due June 15<sup>th</sup>.
- A final DQO work shop was held May 17<sup>th</sup>.
- The DQO has defined a phased approach to resolving uncertainty in the vadose zone and groundwater. The phased approach involves using geophysical technologies to define plume pathways of migration as follows:
  - High Resolution Resistivity (HRR) for the vadose zone: near areas of deep contamination B/BX/BY/C WMA.
  - Seismic Reflection for groundwater contamination north of the 200 East Area to resolve possible erosional channels where conceptual models have predicted a groundwater divide.
- Wells have been identified in the DQO for the following:
  - Three to five vadose zone ground truthing wells following review of (HRR) survey results. The HRR results will be used to confirm or change planned well placement. One or more of these wells could be turned into deep push wells within the BX or C Tank Farm. BY Tank Farm has been eliminated as a potential area for additional well placement due to large existing infrastructure within this farm.
  - Five wells have been identified to evaluate, characterize and delineate potential and known groundwater plumes.
  - Up to three wells have been identified to determine potential sources of intercommunication between the unconfined and confined aquifer. One of these wells is planned this summer near 299-E33-12.
  - Three contingency wells have been identified. These wells may be determined to be necessary based on seismic reflection surveys completed to the north of the 200 East Area.

**Drilling SAP:** The drilling SAP for three of the groundwater wells described above is on schedule for internal review at the end of April. The SAP is planned for concurrent EPA and DOE review near the end of May. The drilling SAP will include the following scope in FY2006.

- Drill 3 new remedial investigation wells.
  - 1) A well to define the width of the uranium plume to the north of well 299-E33-26 and south of well 699-49-55.
  - 2) A well to define the concentration of technetium between well 699-49-57A and well 699-52-57.
  - 3) A well to define contamination in the Rattlesnake Ridge confined aquifer upgradient of well 299-E33-12.

**Work Plan:** SOW for subcontracting Work Plan and SAP is scheduled to be released June 6<sup>th</sup>.

## 200-PO-1 GROUNDWATER OPERABLE UNIT

May 18, 2006

### GROUNDWATER OPERABLE UNIT STATUS

#### 200-PO-1 OU

- Regulatory Path Forward:
  - A tentative path forward is currently being negotiated as part of M-015-00 milestone discussions.
- SAP:
  - DOE-RL is currently implementing the approved 200-PO-1 SAP.
- DQO:
  - The DQO process continued for a 200-PO-1 Investigation Plan/Feasibility Study effort. John Price requested that a meeting date be scheduled to discuss the strawman draft report.
- Wells:
  - Integrating with Waste Sites on planned 216-A-4 characterization well. Plan to complete proposed well as a groundwater monitoring well.
  - Integrating with ORP on planned wells at WTP.
    - Three entry wells and one corehole are planned.
    - In order to manage waste at the drill site, a supplement to the 200-PO-1 Waste Control Plan was provided for project manager approval (Attachment 5). John Price and Arlene Tortoso approved the additions.
    - In order to optimize an opportunity to collect groundwater samples in the aquifer interval in the 200-PO-1 OU, a UMM Agreement was reached to use the existing 200-PO-1 SAP for the effort. Arlene Tortoso requested that a summary of the WTP well sampling effort be provided at the next UMM for the record. Note that this work has received ORP approval pending RL notification to ORP on sampling activity requested.
  - Integrating with BC Cribs project to replace pumps at two wells in BC Cribs for sampling. The wells are 299-E13-9 and 299-E13-11.
- Science & Technology
  - A SOW has been prepared for High Resolution Reflection Seismic Pilot Study in 200 East Area. Information on the pilot study has been shared with DOE and the regulators.
  - Plans are being made to test an in-situ tritium sensor in the 299-E17-18 well adjacent to 216-A-36B Crib south of PUREX.

200-ZP-1 P+T System Performance For FY2006

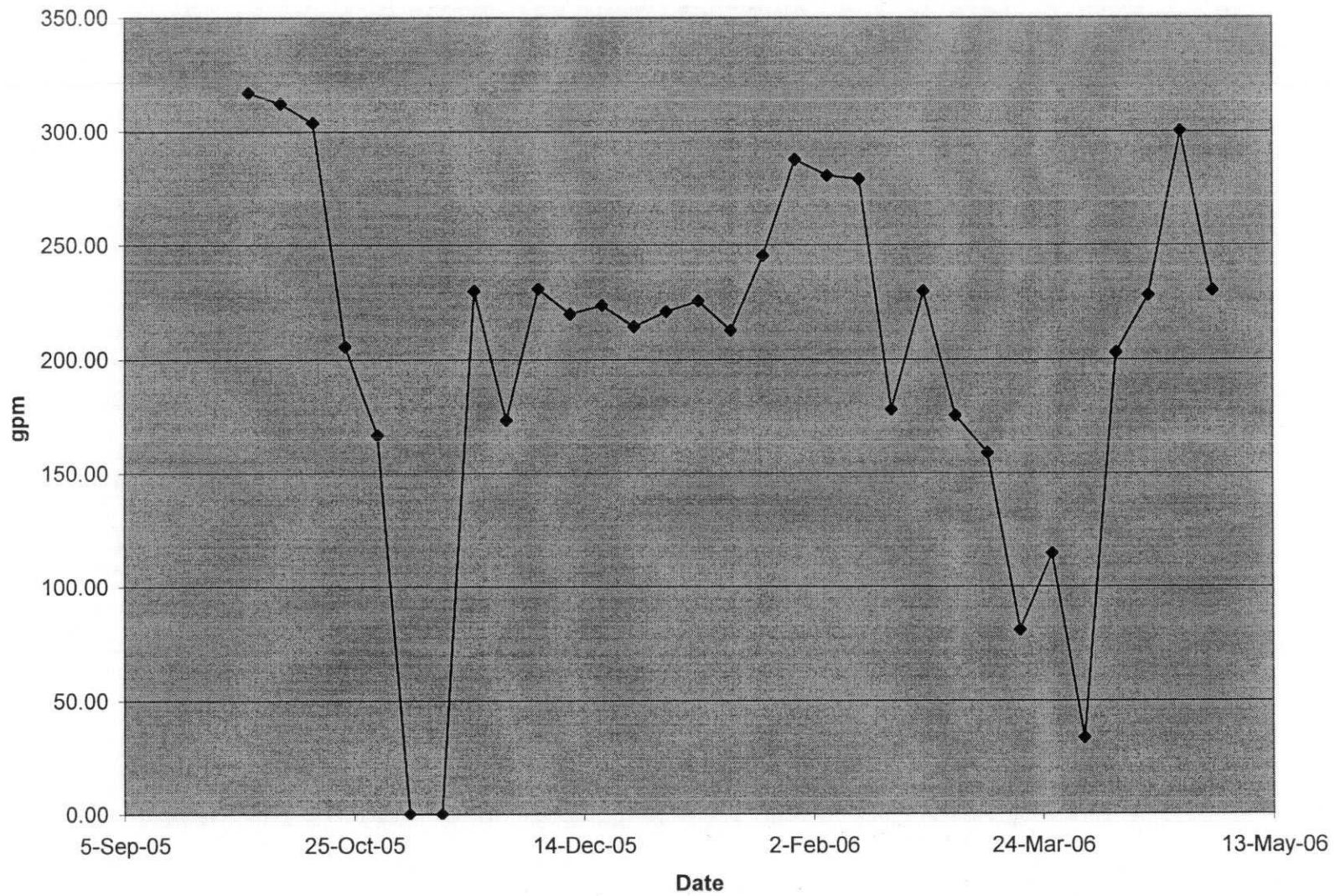


Figure 1  
Attachment 4, Figure 1

**Table A-2. 200-ZP-1 Chemical Monitoring Well List**

|            |              |             |  |
|------------|--------------|-------------|--|
| 299-W6-2   | 299-W11-32   | 299-W15-39  | 299-W22-49                                       |
| 299-W6-3   | 299-W11-37   | 299-W15-40  | 299-W22-50                                       |
| 299-W6-6   | 299-W11-39   | 299-W15-41  | 299-W22-79                                       |
| 299-W6-7   | 299-W11-40   | 299-W15-42  | 299-W22-80                                       |
| 299-W6-10  | 299-W11-41   | 299-W15-43  | 299-W22-81                                       |
| 299-W7-1   | 299-W11-42   | 299-W15-44  | 299-W22-82                                       |
| 299-W7-3   | 299-W11-43   | 299-W15-45  | 299-W22-83                                       |
| 299-W7-4   | 299-W11-45 * | 299-W15-46  | 299-W22-84                                       |
| 299-W7-5   | 299-W11-46   | 299-W15-47  | 299-W22-85                                       |
| 299-W7-7   | 299-W11-47 * | 299-W15-49  | 299-W23-4  |
| 299-W7-8   | 299-W11-86 * | 299-W15-50  | 299-W23-15                                       |
| 299-W7-9   | 299-W12-1    | 299-W15-152 | 299-W23-19                                       |
| 299-W7-11  | 299-W13-1    | 299-W15-763 | 299-W23-20                                       |
| 299-W7-12  | 299-W14-5    | 299-W15-765 | 299-W23-21                                       |
| 299-W8-1   | 299-W14-6    | 299-W17-1   | 299-W26-7  |
| 299-W10-1  | 299-W14-11   | 299-W18-1   | 299-W26-12                                       |
| 299-W10-4  | 299-W14-13   | 299-W18-16  | 299-W26-13                                       |
| 299-W10-5  | 299-W14-14   | 299-W18-21  | 299-W27-2  |
| 299-W10-8  | 299-W14-15   | 299-W18-22  | 699-34-88  |
| 299-W10-13 | 299-W14-16   | 299-W18-23  | 699-38-70  |
| 299-W10-14 | 299-W14-17   | 299-W18-24  | 699-39-79  |
| 299-W10-17 | 299-W14-18   | 299-W18-27  | 699-43-89  |
| 299-W10-19 | 299-W14-19   | 299-W18-28  | 699-44-64  |
| 299-W10-20 | 299-W14-71 * | 299-W18-30  | 699-45-69A                                       |
| 299-W10-21 | 299-W14-72 * | 299-W18-31  | 699-47-60  |
| 299-W10-22 | 299-W15-1    | 299-W18-32  | 699-48-71  |
| 299-W10-23 | 299-W15-2    | 299-W18-40  | 699-48-77A                                       |
| 299-W10-24 | 299-W15-6    | 299-W18-86  | 699-48-77C                                       |
| 299-W10-25 | 299-W15-7    | 299-W18-95  | 699-48-77D                                       |
| 299-W10-26 | 299-W15-11   | 299-W19-4   | 699-50-74  |
| 299-W10-27 | 299-W15-15   | 299-W19-12  | 699-55-60A <sup>a</sup>                          |
| 299-W10-28 | 299-W15-16   | 299-W19-41  | LLWMA-8  |
| 299-W11-3  | 299-W15-17   | 299-W19-42  | LLWMA-13   |
| 299-W11-6  | 299-W15-30   | 299-W19-44  | LLWMA-17   |
| 299-W11-7  | 299-W15-31A  | 299-W19-45  | AA <sup>b</sup> *                                |
| 299-W11-10 | 299-W15-32   | 299-W22-2   | BB <sup>b</sup> *                                |
| 299-W11-12 | 299-W15-33   | 299-W22-10  | Tc <sup>99</sup> Monitoring Wells <sup>c</sup> * |
| 299-W11-13 | 299-W15-34   | 299-W22-44  |  |
| 299-W11-14 | 299-W15-35   | 299-W22-45  |  |
| 299-W11-18 | 299-W15-36   | 299-W22-46  |  |
| 299-W11-30 | 299-W15-38   | 299-W22-48  |  |

<sup>a</sup>Formerly 699-51-60

\* <sup>b</sup>200-ZP-1 new wells to be installed in vicinity of Old Laundry Facility and T Plant.

\* <sup>c</sup>At least five additional wells will be added to support Tc<sup>99</sup> investigations by T Tank Farm.

Table A-4. List of Supplemental Wells Supporting CERCLA

| Well Numbers   | Comments   |
|--|--|
| 299-W23-15   | SST(S) tank farm assessment  |
| 299-W23-19   | SST(S) tank farm assessment  |
| 299-W23-19   | SST(SX) tank farm assessment   |
| 299-W23-20   | SST(SX) tank farm assessment   |
| 299-W23-21   | SST(SX) tank farm assessment   |
| 299-W23-4  | SST(SX) tank farm assessment   |
| 299-W26-12   | S-10 detection monitoring  |
| 299-W26-13   | S-10 detection monitoring  |
| 299-W26-7  | S-10 detection monitoring  |
| 299-W27-2  | S-10 detection monitoring  |
| 299-W7-1   | LLBG(3) detection monitoring   |
| 299-W7-11  | LLBG(3) detection monitoring   |
| 299-W7-12  | LLBG(3) detection monitoring   |
| 299-W7-3   | LLBG(3) detection monitoring   |
| 299-W7-4   | LLBG(3) detection monitoring   |
| 299-W7-5   | LLBG(3) detection monitoring   |
| 299-W7-7   | LLBG(3) detection monitoring   |
| 299-W7-8   | LLBG(3) detection monitoring   |
| 299-W7-9   | LLBG(3) detection monitoring   |
| 299-W8-1   | LLBG(3) detection monitoring   |
| <b>Deep Monitoring Wells</b>                             |  |
| 299-W6-3   | Monitors near bottom of aquifer  |
| 299-W6-6   | Monitors near bottom of aquifer  |
| 299-W7-3   | Monitors near bottom of aquifer  |
| 299-W10-14   | Monitors near bottom of aquifer  |
| 299-W11-32   | PNNL-10422, piezos, 15 m (50 ft) (mid-depth) below water table                       |
| * 299-W11-46 (C4950)<br>[redrill of 299-W11-25B (C4669)] | Tank farm assessment   |
| 299-W14-9  | Screened in lower unit 5, 6, and all of 9 across mud unit                            |
| 299-W14-11   | TX-TY Tank Farm assessment   |
| 299-W15-17   | Monitors near bottom of aquifer  |
| 299-W18-1  | large open interval 0 to 60 m (0 to 200 ft) to below water table, needs recompletion |
| 299-W18-22   | Monitors at bottom of aquifer  |

200-ZP-2 Soil Vapor Extraction Rate

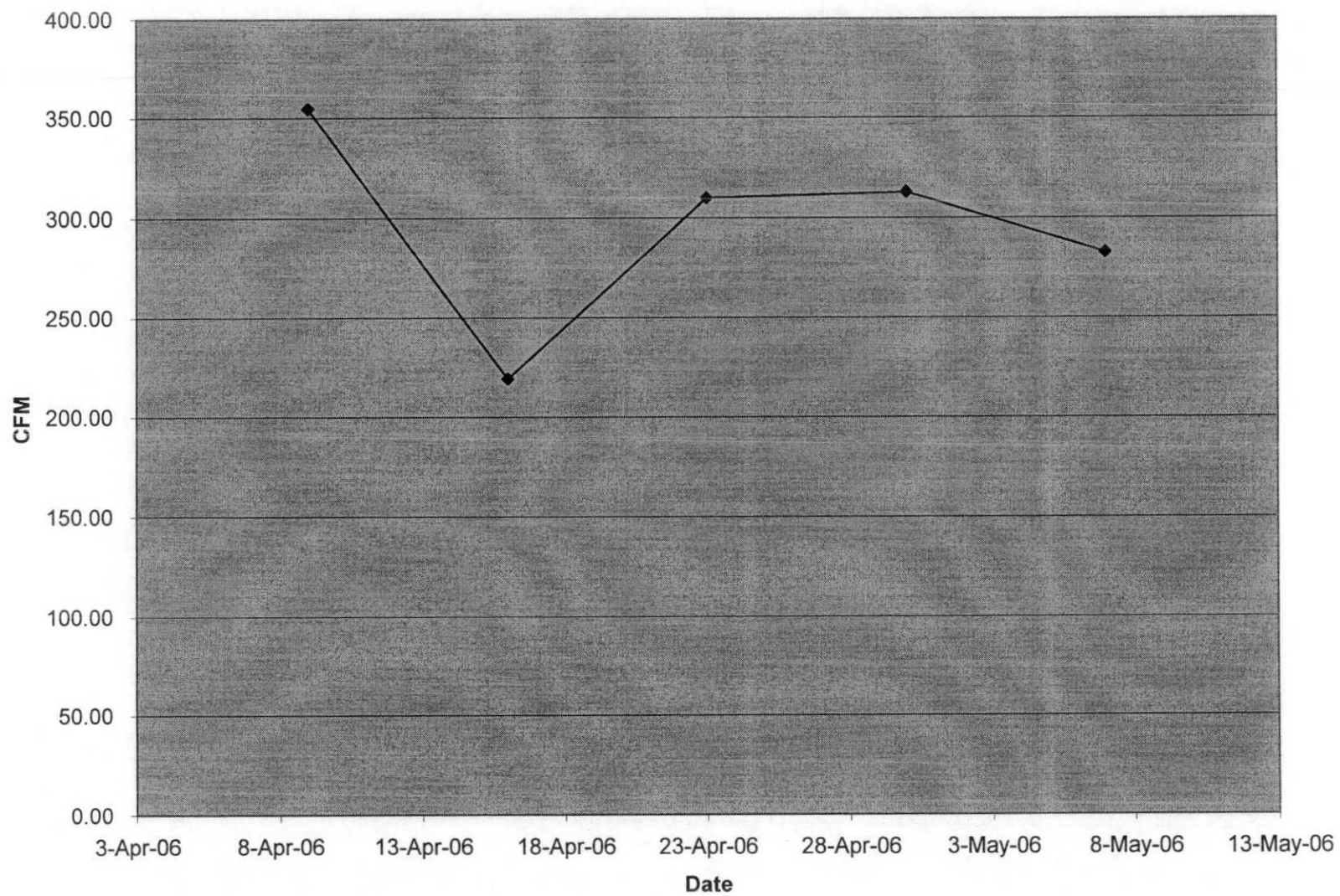


Figure 4

Attachment 4, Figure 4

# **Attachment 3A** **200-PO-1 Operable Unit Supplemental Groundwater Well List**

**RCRA TSD Units****PUREX Cribs**

299-E17-1  
 299-E17-14  
 299-E17-16  
 299-E17-18  
 299-E17-19  
 299-E24-16  
 299-E24-18  
 299-E25-17  
 299-E25-19  
 299-E25-31  
 699-37-47A

**Waste Management Area A-AX**

299-E24-19  
 299-E24-20  
 299-E24-22  
 299-E24-33  
 299-E25-2  
 299-E25-40  
 299-E25-41  
 299-E25-46  
 299-E25-93  
 299-E25-94  
 299-E24-4  
 299-E24-13  
 299-E24-14  
 299-E25-1  
 299-E25-4  
 299-E25-5  
 299-E25-7  
 299-E25-8  
 299-E25-9  
 299-E25-13  
 299-E26-5

**216-A-29 Ditch**

299-E25-26  
 299-E25-28  
 299-E25-32P  
 299-E25-34  
 299-E25-35  
 299-E25-48  
 299-E26-12  
 299-E26-13  
 699-43-45

**WAC Sites****Solid Waste Landfill**

699-22-35  
 699-23-34A  
 699-23-34B  
 699-24-33  
 699-24-34A  
 699-24-34B  
 699-24-34C  
 699-24-35  
 699-25-34C  
 699-26-35A

**400 Area Process Ponds**

699-2-6A  
 699-2-7  
 699-8-17

**200 Area Treated Effluent Disposal Facility**

699-40-36  
 699-41-35  
 699-42-37

**CERCLA (300-FF-5)****618-10 Burial Grounds and 316-4 Crib**

699-S6-E4A  
 699-S6-E4B  
 699-S6-E4D  
 699-S6-E4E  
 699-S6-E4K  
 699-S6-E4L

**618-11 Burial Grounds**

699-12-2C  
 699-13-0A  
 699-13-1E  
 699-13-2D  
 699-13-3A

**CERCLA (200-PO-1)****200-BC-Cribs**

299-E13-1  
 299-E13-3  
 299-E13-4  
 299-E13-6  
 299-E13-7  
 299-E13-8  
 299-E13-9



## **200 AREA UNIT MANAGERS' MEETING SOURCE OPERABLE UNITS AND FACILITIES STATUS**

### **SOURCE OPERABLE UNITS STATUS**

#### **M-15 TPA Milestones**

- Technical discussions of milestones began the week of February 13, 2006.

#### **200-PW-1, 200-PW-3, & 200-PW-6**

- Drilling of the 216-Z-9 slant borehole completed on May 15, 2006 at 145.5' downhole. Geophysical logging of the borehole will start May 16, 2006. After geophysical logging the borehole will be completed as a vapor extraction well.
- Comments have been incorporated into the draft field summary report for A-8 borehole and the document is being finalized.
- Work is progressing on the 200-PW-1/3/6 RI Report. The report is on schedule to meet the October 31, 2006 TPA milestone date.
- Vista Engineering completed a cross-well seismic investigation in the 216-Z-1A area on 3/8/06. The results will be used to refine the stratigraphy under the waste site to support evaluation of contaminant migration pathways. The interpretation and final report are anticipated the end of May.
- Vista Engineering drilled a well 190 ft deep at the headend of Z-1A to support the test. The well will be geophysically logged before it is completed as an SVE well.
- Vista installed an instrument tree in the air space of the 216-Z-9 trench May 3, 2006 and has started collecting data to support the conceptual model of carbon tetrachloride evaporation during disposal.
- The interpretation and final report of the cross-well seismic investigation at Z-9 are anticipated by the end of May.

#### **200-TW-2 & 200-PW-5 (no change)**

#### **200-CW-1 & 200-CW-3 (no change)**

#### **200-PW-2 & 200-PW-4**

- The Draft A FS and Proposed Plan were delivered to RL on May 15, 2006, for transmittal to Ecology by May 31. Draft A closure plans were submitted to Ecology on April 28, 2006.

#### **200-CS-1**

- FS Draft A submitted to Ecology on March 30, 2006.
- PP Draft A submitted to Ecology on March 30, 2006.
- Closure Plans Draft A submitted to Ecology on March 30, 2006.

- Ecology has proposed a permit modification as the decision pathway for the 200-CS-1 OU and 90-day review cycle in accordance with TPA section 9.2.1 of the HFFACO.

#### **200-CW-5, CW-2, CW-4, & SC-1 (no change)**

- Researching discrepancies between the September 1974 Battelle document and the RI data at U-Pond.

#### **Ecological Risk Assessment**

- The Phase III Eco SAP is undergoing the FH concurrence and approval process.

#### **200-IS-1 & 200-ST-1**

- Preparing Steps 6 and 7 of the DQO for internal review.
- Ecology has recommended D&D removal as the closure path for the 241-CX-70, 241-CX-71, 241-CX-72, 276-S-141 and 276-S-142 Tanks.

#### **200-LW-1/200-LW-2**

- Ecology requested an extension on the review of RI Report, until May 31, 2006.
- Efforts continued on preparation of FS.

#### **200-MW-1**

- RI Report, Draft A, was submitted to EPA on 4/30/2006, the TPA Milestone date.
- Met with EPA to discuss sampling strategy for borehole at 216-A-4 crib.

#### **200-UR-1**

- Preparing Rev. 1 of work plan to support field work start in June.

#### **200-SW-1/2**

- A DQO summary report and the Sampling and Analysis Instruction report for nonintrusive characterization in the 200-SW-2 waste sites were completed (including FH approvals and concurrences from DOE-RL and Ecology). Characterization scope includes geophysical investigations, passive organic vapor sampling, and radiation surveys. Field work planning is underway; characterization should begin in June.

#### **BC Cribs and Trenches**

- Letter from RL to EPA in December offered potential to excavate near-surface contamination under some conditions. Supporting efforts to resolve discrepancies in the remedial actions at BC Cribs include:
  - Status was presented to the HAB on 1/11/06. Path-forward is being developed.

- Development of excavation criteria is proceeding with focus on “hot spots” representing potential intruder risk.
  - Recent meeting on 3/3/2006 provided additional clarification of EPA’s position.
- EPA provided list of items/issues to RL on May 1, which could clarify the “hot spot” removal discussion.

## **200-UW-1**

- Field work per the Time Critical Removal Action (TCRA) RAWP continues. 200-W-42 pipeline from the south end of 216-U-8 to 216-U-12 crib has been removed. Sampling results have been analyzed and a Backfill Concurrence request has been approved by FH and RL. Request is currently with Ecology to obtain their concurrence which is expected to facilitate final closure.
- 200-W-42 pipeline excavation north of 216-U-8 is done and sample results are being QC validated. Backfill Concurrence will be initiated once validation is complete.
- In accordance with the updated TCRA, excavation of the remainder of 200-W-42 pipeline has begun. As expected, greater amounts of contamination are being encountered including lateral spread. We are excavating to 15’ (where necessary) and evaluating options for too high contamination levels which are below 15’. **Special attention is needed to establish more achievable PRG / RAG limits for ground water protection. (See below.)**
- Final Draft ROD and responsiveness summaries were sent to EPA and RL legal on 4/5/06 for review. ROD approval date is currently scheduled for 5/29/06 but is slipping due to extensive comments and a need to address organization and content of this document.
- Responsiveness summaries for TPA Change Request for reclassifying Crib 216-U-12 to a RCRA Past Practice (RPP) unit are in process. Change is expected to be approved before ROD is approved.
- TPA Change Request to change 216-U-15 from a CPP to a RPP has been drafted and is with RL for review. Change is expected to be approved before the ROD is approved. No public review is anticipated prior to change approval.
- PRGs / RAGs for 200-UW-1 need to be finalized. Modeling methodology and input parameters were presented to both EPA and Ecology. Modeling is proceeding to determine goals based on 1000 and 10000 year MCLs. Once completed, results will be presented to RL, EPA and Ecology to determine acceptable PRGs / RAGs. **Due to contamination findings below 15’ at 200-W-42 excavation, establishing acceptable goals need to be given a high priority.**
- Haul Road construction into Area C borrow area (paved road and barricade inspection station) is complete. Final resolutions of punch list items are being worked.
- Area C cultural review has not been completed. It is being challenged due to view impact from Rattlesnake Mountain. RL legal is evaluating correspondence that will initiate a 30 day public review.

## **FACILITIES STATUS**

- **U Plant Canyon Disposition Initiative (CDI)**  
Continued development of Remedial Design Engineering Alternatives Studies
  - Canyon reactivation study (crane, HVAC, and electrical/lighting) (June)
  - Equipment size reduction/cell space optimization study (July)
  - Canyon demolition study (July)Continued development of Remedial Design and Remedial Action Work Plan (RD/RA Workplan)
- **Facility Binning (no change)**
- **Miscellaneous Facility D&D**  
Planning to D&D five structures (2707E, 2713E, 2715E, 2719E and 2722E) that do not have active utilities and have already undergone initial demolition preparation activities. This effort provides fill-in work and a skills-sharpening opportunity for workers that are awaiting demolition work at PFP's 232-Z structure as its start has been delayed.
- **B-Plant Stack Downgrade to Minor Emission Status (no change)**
- **PUREX Stack Downgrade to Minor Emission Status (no change)**
- **209E, B-Plant, U-Plant, PUREX and REDOX Ventilation Transition to Intermittent Ventilation (no change)**

## Attachment 7

|   |  |
|---|--|
| - based on location (Z-1A/13/12 or Z-9) of monitoring point; specific points may be beyond SVE zone of influence during particular operating configurations     |  |
| - Z-13 and Z-12 wells off-line Oct 96 - Apr 98  |  |
| - CPT-1A, CPT-9A, and possibly CPT-7A appeared to be beyond SVE zone of influence in Oct 96 based on differential pressure (BHI-01105, p. 6-1)                  |  |
| - CPT-9A, CPT-21A, CPT-28 beyond SVE zone of influence in May 96 based on CCM concentrations and airflow modeling based on measured vacuums (BHI-01105, p. 6-1) |  |

## Attachment 8

| 200-PW-1<br>(200-ZP-2)   |      | 10/25/2005     | 11/01/2005     | 11/28/2005     | 12/20/2005     | 01/26/2006     | 02/23/2006     | 03/28/2006     | 04/28/2006     |      |     |
|--|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|-----|
| Location<br>(Well or Probe)<br>/feet bgs   | Site | CCl4<br>(ppmv) | CCl4<br>(ppmv) | CCl4<br>(ppmv) | CCl4<br>(ppmv) | CCl4<br>(ppmv) | CCl4<br>(ppmv) | CCl4<br>(ppmv) | CCl4<br>(ppmv) |      |     |
| CPT-17/ 10 ft  | Z-9  | ---            | (n)            | 1.4            | 1.2            | 1.2            | 1.3            | 1.5            | 1.7            | 2.0  |     |
| CPT-18/ 15 ft  | Z-9  | 0              |                |                | 0              | 0              | 0              | 0              | 0              | 0    |     |
| CPT-4E/ 25 ft  | Z-1A |                |                |                |                |                |                |                |                | 2.4  |     |
| CPT-16/ 25 ft  | Z-9  | 1.6            |                | 1.2            | 1.4            | 1.1            | 1.1            | 1.1            | 1.1            | 1.0  |     |
| CPT-32/ 25 ft  | Z-1A |                |                | 1.1            | 3.4            | 4.0            | 4.8            | 6.4            |                |      |     |
| CPT-30/ 28 ft  | Z-1A | 1.2            |                | 0              | 1.1            | 0              | 0              | 0              |                |      |     |
| CPT-13A/ 30 ft   | Z-1A | 3.6            |                | 4.1            | 3.9            | 3.6            | 3.5            | 3.3            |                | 3.6  |     |
| CPT-7A/ 32 ft  | Z-1A | 2.3            |                | 2.7            | 2.2            | 2.8            | 3.3            | 3.8            |                | 2.4  |     |
| CPT-27/ 33 ft  | Z-9  | 1.8            |                | 0              | 0              | 0              | 0              | 0              |                | 0    |     |
| CPT-1A/ 35 ft  | Z-12 | 17.2           |                | 9.1            | 3.6            | 7.7            | 6.0            | 7.4            |                | 6.2  |     |
| CPT-28/ 40 ft  | Z-9  |                |                |                |                |                |                |                |                |      |     |
| CPT-33/ 40 ft  | Z-18 |                |                |                |                |                |                |                |                |      |     |
| CPT-34/ 40 ft  | Z-18 | 1.8            |                |                |                |                |                |                |                | 1.3  |     |
| CPT-21A/ 45 ft   | Z-9  |                |                |                |                |                |                |                |                |      |     |
| CPT-9A/ 50 ft  | Z-9  | 52.0           |                | 50.9           | 50.6           | 48.1           | 50.4           | 46.1           |                | 46.9 |     |
| CPT-9A/ 60 ft  | Z-9  | 25.5           |                | 21.2           | 18.6           | 17.4           | 11.4           | 16.0           |                | 17.3 |     |
| CPT-28/ 60 ft  | Z-9  |                |                |                |                |                |                |                |                |      |     |
| CPT-C3872 / 61 ft  | Z-1A | 4.0            |                | 4.3            | 3.7            | 5.1            | 6.3            | 9.9            |                |      |     |
| CPT-9A/ 64 ft  | Z-9  | 38.6           |                | 36.9           | 36.9           | 33.4           | 36.2           | 36.6           |                | 33.1 |     |
| CPT-16/ 65 ft  | Z-9  |                |                |                |                |                |                |                |                | 5.3  |     |
| CPT-21A/ 65 ft   | Z-9  | 151            |                | 137            | 140            | 139            | 146            | 145            |                | 139  |     |
| CPT-1A/ 68 ft  | Z-12 |                |                |                |                |                |                |                |                |      |     |
| CPT-24/ 70 ft  | Z-9  |                |                |                |                |                |                |                |                | 4.4  |     |
| CPT-32/ 70 ft  | Z-1A |                |                |                |                |                |                |                |                |      |     |
| W15-219SST/ 70 ft  | Z-9  |                |                |                |                |                |                |                |                |      |     |
| CPT-18/ 75 ft  | Z-9  |                |                |                |                |                |                |                |                | 3.4  |     |
| W15-82/ 83 ft  | Z-9  | 8.1            |                | 1.4            | ---            | (m)            | ---            | (m)            | ---            | (m)  | 2.2 |
| CPT-21A/ 86 ft   | Z-9  | 208            |                | 196            | ---            | (p)            | 186            | 194            | 201            |      | 192 |
| CPT-28/ 87 ft  | Z-9  | 241            |                | 219            | 224            | 213            | 226            | 217            |                | 217  |     |
| W18-152/ 101 ft  | Z-12 | 12.7           |                | 14.2           | 14.5           | 15.4           | 15.2           | 16.2           |                |      |     |
| W15-8U/ 103 ft   | Z-9  | 10.4           |                | 2.6            | 5.1            | 3.1            | 4.5            | 1.3            |                | 1.5  |     |
| W18-167/ 106 ft  | Z-1A | 63.1           |                | 174            | ---            | (m)            | ---            | (m)            | ---            | (m)  |     |
| CPT-4F/ 109 ft   | Z-1A |                |                |                |                |                |                |                |                |      |     |
| W18-165/ 109 ft  | Z-1A | 65.1           |                | 394            | 220            | 181            | 160            | 164            |                |      |     |
| W15-217/ 114 ft  | Z-9  | 16.1           |                | 1.7            | 8.4            | 11.5           | 19.7           | 12.1           |                | 1.0  |     |
| CPT-24/ 118 ft   | Z-9  |                |                |                |                |                |                |                |                | 22.9 |     |
| W15-220SST/ 118 ft   | Z-9  |                |                |                |                |                |                |                |                | 17.9 |     |
| W18-249/ 130 ft  | Z-18 | 22.5           |                | 22.0           | 12.2           | 12.4           | 17.1           | 24.1           |                |      |     |
| W15-219SST/ 130 ft   | Z-9  |                |                |                |                |                |                |                |                |      |     |
| W18-248/ 131 ft  | Z-1A | 67.0           |                | 23.1           | ---            | (m)            | ---            | (m)            | ---            | (m)  |     |
| W15-95L/ 144 ft  | Z-9  | 15.8           |                | 16.7           | 19.0           | 19.9           | 22.6           | 20.6           |                | 17.8 |     |
| W15-219SST/ 155 ft   | Z-9  |                |                |                |                |                |                |                |                |      |     |
| W15-220L/ 183 ft   | Z-9  |                |                |                |                |                |                |                |                | 2.4  |     |
| W15-219L/ 175 ft   | Z-9  |                |                |                |                |                |                |                |                | 4.5  |     |
| W15-8L/ 176 ft   | Z-9  | 4.0            |                | 0              | 0              | 4.0            | 5.4            | 3.5            |                | 1.5  |     |
| W15-84L/ 180 ft  | Z-9  |                |                |                |                |                |                |                |                | 4.2  |     |
| W15-46/ 217 ft   | Z-9  | 3.0            | ---            | (o)            | 0              | 0              | 4.7            | ---            | (p)            | 2.1  | 0   |
| (m) Unable to sample; well in use by Vista Engineering   |      |                |                |                |                |                |                |                |                |      |     |
| (n) Unable to sample; aboveground tubing needs to be repaired. Repaired and sampled on 11/1/2005.                                |      |                |                |                |                |                |                |                |                |      |     |
| (o) On 10/25/05, well 299-W15-46 sampled at a depth of approximately 172 ft. E-tape could only be advanced to a depth of 173 ft. |      |                |                |                |                |                |                |                |                |      |     |
| (p) Unable to pull representative sample.  |      |                |                |                |                |                |                |                |                |      |     |

Carbon Tetrachloride Concentrations  
Monitored at 200-PW-1 Passive Soil Vapor Extraction Wells  
October 2005 - April 2006

| 200-PW-1<br>(200-ZP-2)   | 10/19/2005 | 11/23/2005 | 12/15/2005 | 1/27/2006 | 2/28/2006 | 3/27/2006 | 4/28/2006 |
|--|------------|------------|------------|-----------|-----------|-----------|-----------|
| Location<br>(Well or Probe)  | CCI4       | CCI4       | CCI4       | CCI4      | CCI4      | CCI4      | CCI4      |
| /feet bgs  | (ppmv)     | (ppmv)     | (ppmv)     | (ppmv)    | (ppmv)    | (ppmv)    | (ppmv)    |
| W18-6L/ 208 ft   | 19.8       | ---(b)     | ---(b)     | ---(b)    | ---(b)    | ---(b)    | ---(b)    |
| W18-7/ 197 ft  | 0          | 9.2        | 11.7       | 15.8      | 16.2      | 15.3      | 33.8      |
| W18-10L/ 183 ft  | 8.4        | 11.6       | 4.0        | 12.1      | 13.0      | 3.9       | 14.1      |
| W18-11L/ 199 ft  | 0          | 5.9        | 0          | 7.6       | 9.0       | 0         | 5.4       |
| W18-12/ 198 ft   | 0          | 1.6        | 0          | 4.9       | 9.4       | 1.3       | 0         |
| W18-246L/ 170 ft   | 13.0       | ---(b)     | ---(b)     | ---(b)    | ---(b)    | ---(b)    | ---(b)    |
| W18-247L/ 167 ft   | 0          | 0          | 2.4        | 5.1       | 7.6       | 0         | 3.0       |
| W18-252L/ 175 ft   | 0          | ---(b)     | ---(b)     | ---(b)    | ---(b)    | ---(b)    | ---(b)    |
| (b) in use by Vista Engineering for cross-well seismic investigation |            |            |            |           |           |           |           |

**Issue Resolution Meeting  
Agreements and Issues List  
May 18, 2006  
200 Area Unit Managers' Meeting**

**Agreement:** EPA provided approval of DOE/RL-2000-40, Rev. 6, Waste Management Plan for the Expedited Response Action for 200 West Area Carbon Tetrachloride Plume and the 200-ZP-1 and 200-PW-1 Operable Units (Attachment 4, Figures 2 and 3).

**Agreement:** For the 200-PO-1 OU, DOE and Ecology agree that Section 4.5 of the existing 200-PO-1 SAP is sufficient to support data collection from the planned borings at WTP.

**Agreement:** DOE and Ecology approved a supplemental well list to the 200-PO-1 Waste Control Plan (Attachment 5).



**200 Area Unit Managers' Meeting  
OPEN ACTION ITEMS & TRACKING**

| Action # | Action/Subject  | Assigned To             | Owed To     | Assigned Date | Original Due Date | Adjusted Due Date | Date Complete | Status  |
|----------|---|-------------------------|-------------|---------------|-------------------|-------------------|---------------|---|
| 53       | Review original TPA and early change packages for better understanding on requirements for 2008 M-015 milestone; mock up change package to provide clarification of requirements to meet 2008 milestone to be included in next modification to M- | All - Williams          | All         | 2/17/05       | TBD               | 5/18/06           | 5/18/06       | Closed. Elevated to IAMIT.  |
| 53a      | Provide clarification wording for M-015 completion criteria at next meeting. Discuss TPA Milestone wording for M-15-00C Draft A of RI/FS.   | All - Williams          | All         | 4/21/05       | 7/30/05           | 5/18/06           | 5/18/06       | Closed. Elevated to IAMIT.  |
| 60       | Finalize Central Plateau Facility Binning Report, DOE/RL-2005-54  | RL/FH - Romine          | EPA/Ecology | 4/21/05       | 5/19/05           | 5/18/06           | 5/18/06       | Closed. Elevated to IAMIT.  |
| 64       | Determine solution to adding pipelines not associated with an OU into WIDS with only a TBD in the OU field versus needing to link them to Waste Management Areas (WMAs).  | All - Stults            | All         | 8/18/05       | 9/15/05           | 5/18/06           | 5/18/06       | Closed. To be addressed through M-15 and Appendix C changes. Included in Source Status. |
| 64a      | Discuss with ORP (Janet Badden of CH2M) drafting necessary TPA changes.   | Ecology - Stults        | All         | 8/18/05       | 9/15/05           | 5/18/06           | 5/18/06       | Closed. To be addressed through M-15 and Appendix C changes. Included in Source Status. |
| 65       | Schedule 200-PO-1 Regulatory Path forward meeting with Ecology (EPA requested that this be resolved before change package goes out).  | DOE - Tortoso           | Ecology     | 9/15/05       | 10/20/05          | 5/18/06           | 5/18/06       | Closed. DOE plans to proceed with DQO and FS.   |
| 66       | RL respond to EPA's request for a new soil vapor extraction (SVE) system for ZP-2.  | DOE - Tortoso           | EPA         | 4/19/06       | 5/18/06           |                   | 5/18/06       | Closed. DOE has costed out SVE for FY07. Included in 5-year review.                     |
| 67       | Develop process to streamline Waste Control Plan revisions associated with pushes and other minor changes.  | DOE/<br>FH-Winterhalder | All         | 5/18/06       | 6/15/06           |                   |               |   |
| 68       | Provide status report on MP-14 status   | Ecology - Price         | All         | 5/18/06       | 6/15/06           |                   |               |   |
| 69       | Evaluate status of NEPA documentation at NRDWL  | DOE/FH - Romine         | Ecology     | 5/18/06       | 6/15/06           |                   |               |   |

**DISTRIBUTION  
UNIT MANAGERS' MEETING,  
200 AREA GROUNDWATER SOURCE OPERABLE UNITS**

DOE/RL

|                |       |
|----------------|-------|
| Bryan Foley    | A6-38 |
| Larry Romine   | RMIS  |
| Arlene Tortoso | RMIS  |

EPA

|               |       |
|---------------|-------|
| Craig Cameron | B1-46 |
|---------------|-------|

Ecology

|                |       |
|----------------|-------|
| Brenda Jentzen | RMIS  |
| John Price     | H0-57 |
| Jennie Stults  | H0-57 |
| Jean Vanni     | H0-57 |

FH

|                     |       |
|---------------------|-------|
| Lanny Dusek         | RMIS  |
| Gloria Cummins      | RMIS  |
| Bruce Ford          | RMIS  |
| Jane Borghese       | E6-35 |
| Mark Byrnes         | RMIS  |
| Virginia Rohay      | RMIS  |
| L. Craig Swanson    | RMIS  |
| Mary Todd-Robertson | E6-35 |

CHG

|                |      |
|----------------|------|
| Curt Wittreich | RMIS |
|----------------|------|

PNNL

|                 |       |
|-----------------|-------|
| Stuart Luttrell | K6-96 |
|-----------------|-------|

Oregon State/Tribes

|                  |       |
|------------------|-------|
| Shelly Cimon     | EMAIL |
| Stan Sobczyk     | EMAIL |
| Sandra Lilligren | EMAIL |

Administrative Record (2)

H6-08

Correspondence Control

A3-01

Please inform Dee Goodson – FH (373-4456)  
of deletions or additions to the distribution list.